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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

NGHIEM, MICHAEL P

ART UNIT	PAPER NUMBER
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2863

DATE MAILED: 02/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/771,942

Applicant(s)

NAKAZAWA ET AL.

Examiner

Michael P Nghiem

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AW

-- Th MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23, 25-34 and 36-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 40-42 is/are allowed.
- 6) ☒ Claim(s) 23, 25, 27, 29, 30 and 32-34 is/are rejected.
- 7) ☒ Claim(s) 26, 28, 31 and 36-39 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

The Amendment filed on October 14, 2003 has been acknowledged.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 23, 25, 27, 29, 30, and 32-34 are rejected under 35 U.S.C. 102(e) as being anticipated by Okubo et al. (US 6,106,112).

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Okubo et al. discloses all the claimed features of the invention.

Regarding claims 25, 29, 30, and 34, Okubo et al. discloses an ink cartridge (Fig. 1) comprising:

- a cartridge main body (1) having a first case (lower case of 1) and a second case (upper case of 1 separated from lower case by 15) joined to the first case (Fig. 1);

- first and second ink bags (22u, 22l) each comprising a bag main body (main bodies of 22's) storing ink and an outlet (23u, 23l) through which the ink can be discharged from the bag main body, the first and second ink bags being housed by the first case and the second case (Fig. 1);

- a partition plate (15) attached to a predetermined position of the first case, said partition plate separating compartments housing the first ink bag and the second ink bag respectively (Fig. 1);

- a first detection plate (18l) attached to the first ink bag, and having a first detection projection (19l) extended in a direction substantially perpendicular to the bottom plate portion (Fig. 1), the first detection projection moving in the direction substantially perpendicular to the bottom plate portion and projecting from the cartridge main body in response to the consumption of ink in the first bag main body (Fig. 1);

- a second detection plate (18u) attached to the second ink bag, and having a second detection projection (19u) extended in the direction substantially perpendicular to the bottom plate portion (Fig. 1), the second detection plate moving in the direction substantially perpendicular to the bottom plate portion and projecting from the cartridge main body in response to the consumption of ink in the second bag main body (Fig. 1), wherein the first and second detection projections differ from each other at least in shape or color (19l differs from 19u in shape, Fig. 1).

Regarding claim 23, Okubo et al. further discloses that the first case comprises a bottom plate portion (2) and a side plate portion (4), the first case having an opening

(opening of lower case, Fig. 1) on a top thereof for housing the first and second ink bags (Fig. 1), wherein the second case covers the opening of the first case (upper case covers lower case, Fig. 1).

Regarding claim 25, Okubo et al. further discloses that each of the first case and the second case comprises a partition plate clamp face (10's, Fig. 1) such that the partition plate is clamped by the partition plate clamp face of the first case and the partition plate clamp face of the second case for defining the position of the partition plate (10's engage 14's and 26's for defining the position of 15).

Regarding claim 27, Okubo et al. further discloses that each of the first case and the second case comprises an ink outlet clamp face (9's) such that the ink outlets are clamped by the ink outlet clamp faces (Fig. 3) for defining the positions of the ink outlets, and wherein at least one of the ink outlet clamp faces is elastically displaceable (9 is part of 1 which is made of resin, column 2, lines 2-4).

Regarding claim 30, Okubo et al. further discloses a joint mechanism (joint mechanism comprising 10's, 14's, 26's) for detachably joining the first ink cartridge and the second ink cartridge (Fig. 1).

Regarding claim 32, Okubo et al. further discloses that the joint mechanism has snap-fit parts (27, 11) formed in a side portion of the first ink cartridge and in a side portion of the second ink cartridge (Fig. 7).

Regarding claim 33, Okubo et al. further discloses that the second ink cartridge comprises a recess (recess above 15, Fig. 1) into which the first ink cartridge can be fitted in the thickness direction (Fig.1).

Allowable Subject Matter

2. Claims 26, 28, 31, and 36-39 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

3. Claims 40-42 are allowed.

Reasons For Allowance

4. The combination as claimed wherein an ink cartridge having a waste-ink holding member for storing waste ink poured therein from the outside thereof, said waste-ink holding member attached to the second case (claims 26, 31) or each of the ink outlets comprises a contact portion in contact with each other and a clamp portion

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clamping the partition plate with one another (claims 28, 40) or the length dimension of each detection plate is a value within the range of 0.4 to 0.8 times the length dimension of each ink bag (claims 36, 37) or the waste-ink holding member is placed in the cartridge having the smallest value resulting from dividing a volume of ink in the ink bag housed in each ink cartridge by the number of nozzles of the ink nozzle group corresponding to the ink bag (claim 41) is not disclosed, suggested, or made obvious by the prior art of record.

Response to Arguments

5. Applicant's arguments filed on October 14, 2003 have been fully considered but are traversed as discussed above.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Takemura et al. (US 5,907,343) is a US equivalent of EP 419 876.

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See

MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Contact Information

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Nghiem whose telephone number is (703) 306-3445. The examiner can normally be reached on M-H from 6:30AM – 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Barlow can be reached at (703) 308-3126. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7724 for regular communications and (703) 308-5841 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

A handwritten signature in black ink, appearing to read 'Michael Nghiem', with a stylized flourish at the end.

MICHAEL NGHIEM
PRIMARY EXAMINER

Michael Nghiem

January 29, 2004